

CLAIMS

- 1.- Plastic greenhouse that has a roof, side walls y optionally a front wall and a rear wall, characterised in that it is composed of a framework, made up entirely of pieces of recycled plastic, which basically comprises bearers (1-2) distributed in various sectors over the whole length of the greenhouse consisting of sections (3-4) that are not only fitted together by means of linear connectors (5), but in turn are also joined by means of cross connectors (8) to horizontal sections (6) forming horizontal cross members (7) that strengthen the framework making up the roof, side walls, front wall and rear wall of the greenhouse.
- 2.- Plastic greenhouse according to claim 1 characterised in that the bearers forming the front wall, the rear wall and the side walls of the greenhouse are vertical uprights (2).
- 3.- Plastic greenhouse according to claim 1 characterised in that the bearers forming the side walls of the greenhouse and the roof are curved struts (1).
- 4.- Plastic greenhouse according to claim 1 characterised in that the bearers forming the horizontal cross-members (7) are composed of horizontal sections (6) consisting of a front face (18) and a rear face (19) attached by bracing ribs (20) provided with a series of lugs (17) adjacent to the side edges.
- 5.- Plastic greenhouse according to claims 1, 3 and 4 characterised in that the curved struts (1) are made up of curved sections (3) that have a front face (9) and a rear face (10) linked by bracing ribs (11) on which there are lugs (12), arranged in a line adjoining the top and bottom edges respectively, on which is press-fitted the linear connector (5) that establishes the coupling between consecutive curved sections (3-3'), each curved section (3) being provided at its end edges with a half lug (14) that, along with the other half lug (14') of the consecutive curved span (3'), forms a whole lug, on which a fastening cap (15) is fitted to assure fastening and collinearity between consecutive curved sections (3-3'), while the front face (9) and the rear face

(10) of the curved section (3) are also provided with intermediate lugs (16) on which are fitted the cross connectors (8) that also engage on the lugs (17) of the horizontal sections (6), establishing the fastening between the curved sections (3) and the horizontal sections (6).

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6.- Plastic greenhouse according to claims 1, 2 and 4 characterised in that the vertical uprights (2) are made up of vertical sections (4) that have a front face (9) and a rear face (10), linked by bracing ribs (11) and provided with lugs (12) arranged in a line adjacent to their top and bottom edges respectively, on which the linear connector (5) is press-fitted that assures fastening between consecutive vertical sections (4-4'), each vertical section (4) being provided at its end edges with a half lug (14) that, along with another half lug (14') on the next vertical section (4'), forms a whole lug on which a fastening cap (15) is fitted to assure fastening and collinearity between consecutive vertical sections (4-4'), while the front face (9) and the rear face (10) of the curved section (3) are also provided with intermediate lugs (16) on which are fitted the cross connectors (8) that also engage on the lugs (17) of the horizontal sections (6), assuring the fastening between the curved sections (4) and the horizontal sections (6).

7.- Plastic greenhouse according to claims 5 and 6 characterised in that it includes a plastic outer shell (21) on the front side (9) of the curved sections (3) and of the vertical sections (4).

8.- Plastic greenhouse according to claims 5 and 6 characterised in that it includes a plastic inner shell (33) that is fixed on the rear side (10) of the curved sections (3) and vertical sections (4) by means of clamps (22) consisting of open rings that engage on elongated protuberances (25) defined on the rear side (10), securing the plastic inner shell (33) between the two.

9.- Plastic greenhouse according to claims 5, 6 and 8 characterised in that it includes inner spacer clips (23) that have an open rectangular groove (24) that engages with the rear side (10) of the curved section (3) and vertical

section(4), thereby securing the plastic inner shell (33), and rests on the elongated protuberances (25), said inner spacer clip (23) extending perpendicularly until it ends up in a partly round groove (26) into which there fits a first round rod (27) that houses a first plastic laminar layer (28) which is parallel to and at a constant distance away from the plastic inner shell (33), so that an air chamber is formed between the two.

10.- Plastic greenhouse according to claim 9 characterised in that it includes an intermediate spacer clip (30) that fits on the round rod (27) encircling the laminar layer (28) by means of a partly round groove (29), from which the elongated intermediate clip (30) extends as far as its other end at which it is provided with another partly round groove (31) that engages with another rod (27') encircled by another laminar layer (28'), there being then installed other intermediate clips (30) that separate the innermost rod (27'') and the laminar layer (28'').

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11.- Plastic greenhouse according to claim 10 characterised in that it includes a clamp (34) that engages on the innermost rod (27'') and fastens the innermost laminar layer (28'').

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12.- Plastic greenhouse according to claims 9, 10 and 11 characterised in that rods (27-27'-27'') have perpendicular ridges (32) along their whole length acting as supports for the inner spacer clips (23), for the intermediate spacer clips (35) and for the clamps (34).

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13.- Plastic greenhouse according to claims 1, 5 and 6 characterised in that the linear connector (5) is provided with inner recesses (34) for engaging on the curved section (3) and vertical section (4) lugs (12).

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14.- Plastic greenhouse according to claims 1, 5 and 6 characterised in that the cross connector (8) is provided with inner recesses (34) for engaging on the curved section (3) and vertical section (4) intermediate lugs (16), and on the horizontal section (6) lugs (17).